

obtuse; interorbital space as broad as the upper eyelid; tympanum distinct, three-fourths the diameter of the eye. Fingers rather short, with a rudiment of web; toes half webbed; disks rather large, but much smaller than the tympanum; inner metatarsal tubercle large, compressed, about two-thirds the length of the inner toe. The tibio-tarsal articulation reaches the eye; tibia nearly half length of head and body. Skin smooth above; a fine glandular fold running from the eye downwards to the middle of the side. Purplish brown above, with rather indistinct dark cross-bands on the limbs; glandular lateral fold and a transverse line above the vent yellowish, dark-edged beneath; two or three dark brown ocellar spots edged with yellowish on the lumbar region; lower parts white.

From snout to vent 53 mm.

A single female specimen from the Mabira Forest, Chagwe, Uganda, presented by Dr. C. Christy.

XVII.—*A Revision of the Asilidæ of Australasia.*

By GERTRUDE RICARDO.

[Continued from vol. ix. p. 594.]

DEROMYIA, Philippi.

Verh. zool.-bot. Ges. Wien, xv. p. 705 (1865).

Diogmites, Loew, Berlin. ent. Zeitschr. x. p. 21 nota (1866).

This genus has been as yet confined to the American continent, but the species described below appears to belong to the genus, which is distinguished by the closed fourth posterior cell of wing before it reaches the margin, by the absence of a style to antennæ, by the comparatively long first two joints of antennæ, and by the wide head. The face has no tubercle and the moustache is almost confined to the oral opening. My new genus *Neosaropogon* is distinguished from it by the fourth posterior cell of wing being open or only narrower at border.

Deromyia australis, sp. n.

Type (♀) and two other females from Stannary Hills, N. Queensland, circa 3000 feet (*Dr. T. L. Bancroft*), 1909.

An *Asilus*-looking species, with hyaline wings, blackish abdomen, reddish-yellow antennæ and legs.

Length of type 18 mm., others 16 mm.

Head wider than thorax.

Face covered with pale golden tomentum, flat, raised at oral opening almost as a tubercle, on which the pale yellow bristles forming the moustache are placed. *Palpi* reddish yellow, with long pale yellow hairs. Proboscis long. Beard white. *Antennæ* reddish yellow: the first two joints with thick black hairs; the second slightly the longest; the third club-shaped, hardly longer than the first two joints together. *Forehead* darker than face, with six long black bristles on the ocelligerous tubercle. Hind part of head with bristle-like yellow hairs. *Thorax* greenish grey, with greyish-yellow tomentum, with three black bristles above the transverse suture at sides and numerous ones beyond; breast-sides paler in colour; prothorax well developed; *scutellum* armed with two black bristles. *Abdomen* blackish, with narrow dull reddish posterior borders to segments; sides of dorsum yellowish, grey tomentum on anterior borders and at sides of segments; pubescence very scanty, short, yellowish; ovipositor prominent below.

Legs reddish yellow; hind tarsi and apices of tibiæ black; femora devoid of bristles, tibiæ and tarsi with strong yellow ones. *Wings* hyaline, greyish at apex; veins brown, the small transverse vein situated just beyond the middle of discal cell; the first posterior cell slightly narrower at border, the fourth closed far from border; anal cell very much narrowed at border, but open.

SAROPOGON, Loew.

Linn. Ent. ii. p. 439 (1847).

For species from New Zealand see Hutton, Trans. New Zealand Inst. xxxiii. p. 18 (1900), et p. 195 (1901).

The species as yet recorded from the Australasian Region are confined to Australia, Tasmania, and New Zealand, viz. :—

Saropogon sergius, Walker, List Dipt. ii. p. 347 [*Dasyopogon*] (1849), et vi. Suppl. 2, p. 477 [*Dasyopogon*] (1854); Kertész, Cat. Dipt. p. 73 [*Lasiopogon*] (1909).—*Dasyopogon festinans*, ♂, Walker, Dipt. Saund. i. p. 92 (1851), et List Dipt. vi. Suppl. 2, p. 405 (1854).

Saropogon viduus, Walker, List Dipt. ii. p. 354 et vi. Suppl. 2, p. 483 [*Dasyopogon*] (1849); Hutton, Trans. New Zealand Inst. xxxiii. p. 19 (1901).

Saropogon discus, Walker, List Dipt. ii. p. 358 (1849), et vi. Suppl. 2, p. 483 [*Dasyopogon*] (1854); Hutton, Trans. New Zealand Inst. xxxiii. p. 19 (1901).—*Saropogon hudsoni*, Hutton, l. c. p. 20.

Saropogon suavis, Walker, Trans. Ent. Soc. London, n. ser. iv. p. 327 [*Dasyopogon*] (1857); Kertész, Cat. Dipt. p. 132 [*Dasyopogon*] (1857).

—*Dasyopogon gumaras*, Walker, List Dipt. ii. p. 346 (1849), et vi. Suppl. 2, p. 486 (1854); Kertész, Cat. Dipt. p. 73 [*Lasiopogon*] (1909).

- Saropogon limbinervis*, Macquart, Dipt. Exot. Suppl. 5, p. 71 [*Dasyogon*] (1855); Bigot, Ann. Soc. Ent. France, (5) viii. p. 222 (1898).
Saropogon antipodus, Schiner, Novara Reise, Dipt. p. 166 (1863); Hutton, Trans. New Zealand Inst. xxxiii. p. 20 (1901).
Saropogon semirufus, Bigot, Ann. Soc. Ent. France, (5) viii. p. 414 (1878).
Saropogon chathamensis, Hutton, Trans. New Zealand Inst. xxxiii. p. 20 (1901).
Saropogon clarkii, Hutton, *l. c.* p. 19.
Saropogon extenuatus, Hutton, *l. c.* p. 21.
Saropogon fugiens, Hutton, *l. c.* p. 20.
Saropogon fascipes, Hutton, *l. c.* xxxiv. p. 195 (1901).
Saropogon proximus, Hutton, *l. c.* xxxiii. p. 19 (1901).

Note.—*Saropogon* aphidus, Wlk., from unknown locality. Type appears to be lost.

Saropogon sergius, Walker.

Dasyogon festinans, ♂, Walker.

Type (♂) from New South Wales (presented by Haslar Hospital), in bad preservation.

A reddish species, with reddish-yellow legs and antennæ.

Length 15 mm.

Face covered with golden-yellow tomentum. Moustache of pale yellow bristles. *Palpi* ferruginous, with yellowish hairs. *Antennæ* reddish yellow; the first two joints with yellowish hairs and bristles, the third about one and a half times as long as the first two joints together. *Forehead* blackish, a broad black stripe extending to base of antennæ. Hind part of head with a thick fringe of yellow bristly hairs. *Thorax* (denuded) reddish brown, with black stripes. *Scutellum* reddish brown. *Abdomen* reddish brown, the first segment black; two black lateral stripes begin on the second and extend to posterior border of third segment. Genital organs prominent. Underside reddish yellow, shining. *Legs* reddish yellow. *Wings* (broken); Walker describes them as "colourless, with a slight tawny tinge on the fore part; wing ribs and veins black"; the small transverse vein beyond the middle of discal cell; the transverse vein closing the discal cell joins the fourth vein just below the fork.

Dasyogon festinans, a male type from unknown locality, is identical with this type.

From the description of *Dasyogon nitidus*, Macq., from Tasmania, it is possibly the same species as this.

Saropogon viduus, Walker.

Type (♀) and others from New Zealand.

A wholly black species, with clear wings, clouded at apex.

Length 12-14 mm.

Face black, covered with grey tomentum. Moustache of long black bristles. *Palpi* black, with black hairs. *Antennæ* with many black hairs on the first two joints; the third joint bare, not much longer than the first two joints together. *Forehead* with black hairs. *Thorax* brownish black, with grey tomentose stripes; sides and breast black, with grey tomentum, which is more silvery white on the sides of breast. *Scutellum* with some grey tomentum. *Abdomen* black, somewhat shining, small silvery white spots appear on the sides usually from the second segment onwards. *Legs* black, with black bristles and hairs. *Wings* large, veins brown, apex tinged brown, small transverse vein beyond the middle of discal cell.

The co-type of *Saropogon clarkii* in Brit. Mus. Coll. is almost identical with the above type and specimens, also from New Zealand; the only difference apparent is the position of the small transverse vein of *wing*, which in Hutton's co-type is at or *below* the middle of discal cell and is clouded with brown, fore border tinged brown, not extending beyond the first submarginal cell. *Abdomen* more blue-black, with the white tomentose spots at side more apparent.

Saropogon discus, Walker.

Saropogon hudsoni, Hutton.

Type (♀) and another from New Zealand, and a co-type of *Saropogon hudsoni*.

A black robust species with a broad black *abdomen*, red at apex. *Legs* red, tarsi blackish. *Wings* clear.

Length 12 mm.

Face covered with pale yellowish tomentum. Moustache of pale yellow bristles. *Palpi* black, with pale hairs. *Antennæ* black, the first two joints with black hairs and bristles, the third joint nearly once and a half as long as the first two joints together, the usual style present. *Forehead* blackish, with some long black hairs at sides. Hind part of head with black bristly hairs. *Thorax* blackish, with some tawny tomentum and indistinct black stripes; sides and breast with greyish tomentum. *Scutellum* black, covered with tawny tomentum. *Abdomen* black, sides and apex bright testaceous, the fifth and sixth segments being so on their posterior borders, and the last two segments entirely so. Underside reddish yellow. *Legs* reddish yellow; the tarsi

black; coxæ blackish, with grey tomentum. *Wings* hyaline, very faintly greyish at apex; veins brown; small transverse vein just beyond the middle of discal cell; anal cell very narrow at border.

The co-type of *Saropogon hudsoni*, presented to the British Museum by the late Capt. F. W. Hutton, is identical with the Walker type. He records his species from Mount Peel, Nelson.

Saropogon suavis, Walker.

Dasyopogon gamaras, Walker.

Type (♂) from Australia.

A small, slender, reddish species, with a general resemblance to a *Leptogaster* species.

Length 11 mm.

Face covered with golden-yellow tomentum. Moustache of pale yellow bristles. *Palpi* ferruginous, with yellowish hairs. *Antennæ* (third joint destroyed): Walker describes them as "tawny, the third joint nearly linear, black above." *Forehead* blackish, covered with some golden-yellow tomentum. *Thorax* (denuded) reddish. *Scutellum* similar. *Abdomen* wholly reddish, slender. *Legs* reddish, middle and posterior femora and apices of posterior tibiæ black. *Wings* tinged yellow, veins brown, fourth posterior cell slightly narrowed at opening, the small transverse vein just beyond the middle of discal cell.

Though the third joint of *antennæ* is wanting, there is little doubt this species is a true *Saropogon*.

Dasyopogon gamaras, a male type from unknown region, is identical, but a little larger, measuring 14 mm., and stouter; there is a tinge of black on the second and third segments of abdomen.

Dasyopogon analis, Macq., Dipt. Exot. Suppl. 4, p. 369 (1849).—Type seen by me in Paris Museum may possibly be identical with this species. Head of type is gone. A small species with yellow abdomen. Wings clear, tinged yellow and slightly clouded on cross-veins; all posterior cells open. In Walker's types none of the black markings mentioned by Macquart are present.

Saropogon limbinervis, Macquart.

This species is placed in this genus by Bigot, who had Macquart's type before him.

It is described as black, the fifth segment of *abdomen* testaceous. *Legs* black. *Wings* with veins shaded brown.

Length 6 lines. ♀.

Saropogon antipodus, Schiner.

Described as brown-red. *Face* golden yellow. *Antennæ* black-brown. *Thorax* with golden-yellow stripe and spots, scutellum and breast-sides golden yellow. *Abdomen* shining reddish, the first two segments partly black. *Legs* bright rusty yellow, femora with black stripe, tarsi brownish. *Wings* tinged very pale brownish yellow, with brown veins; the second posterior cell very narrow at base, the fourth narrowed a little at opening.

Length 6 lines.

Auckland. One female.

Saropogon semirufus, Bigot.

From Australia.

A species described as red and black. *Face* with a shining black stripe. *Abdomen* blackish, red at sides and apex. *Antennæ* fawn-coloured. *Wings* pale brown.

Length 12 mm.

Saropogon clarkii, Hutton.

Co-type (♂) in Brit. Mus. Coll., presented by Capt. F. W. Hutton, from New Zealand.

A large black species. *Face* brownish, with whitish-grey tomentum. Moustache black, composed of stout bristles. *Forehead* with bristly black hairs. *Thorax* with two grey tomentose narrow stripes; shoulders grey tomentose and scutellum the same. *Abdomen* blue-black, shining; genital organs black, with black pubescence. *Legs* wholly black. *Wings* hyaline, tinged brown on the fore border at base and where the second vein has its origin.

Length 16 mm.

Saropogon fugiens, Hutton.

Co-type (♂) presented by Capt. F. W. Hutton, from New Zealand; males and females from same locality (*Hudson, Cochrane*).

A blue-black species with golden tomentum on face, on sides and dorsum of *thorax*, and on scutellum. *Legs* reddish, the femora blackish above; tibiæ black at apices, largely so

on the posterior pair. *Wings* hyaline or clouded brown, small transverse vein just beyond the middle of discal cell. *Abdomen* blue-black, shining; in some of the specimens a reddish line at sides is visible; genital organs in male black, with black pubescence; in female a circlet of spines at apex of abdomen.

Length of co-type 12 mm.

ACNEPHALUM, Macquart.

Dipt. Exot. i. (2) p. 167 (1838).

One species is recorded from Australia.

A. punctipenne, Macq. Suppl. 5, p. 71 (1854), unknown to me. The type of *A. coon*, Walker, from unknown locality, is not to be found in the Brit. Mus. Coll.

MICROSTYLUM, Macquart.

Dipt. Exot. i. (2) p. 142 (1838).

One species, *M. testaceum*, Macq. [*Dasypogon*] Suppl. 1, p. 188 (1844), is recorded from Australia. Unknown to me, and not in the Paris Museum.

It is described as testaceous; the *abdomen* black, apex testaceous. *Legs* black, the femora testaceous. *Wings* yellow, the fourth posterior cell closed.

Length 12 lines.

PELLUS, Walker.

Dipt. Saund. i. p. 110 (1851).

This genus was formed for one species.

Phellus glaucus, Walker.

Dipt. Saund. i. p. 110, pl. iv. fig. 6 (1851); id., List Dipt. vi. Suppl. 2, p. 503 (1854); Froggatt, Australian Insects, p. 300, pl. xxviii. fig. 12 (1907).

Type (♀) and another from West Australia. Two males from Swan River, W. Australia. Froggatt states that it is found in the interior of W. Australia.

This genus is not identical with *Phoneus*, Macq., or *Obelophorus*, Schiner, as suggested by this latter author, but is probably nearly related to the latter genus peculiar to Chili, from which it is distinguished by the short stout prolongation on the middle tibiae. The *face* is covered with hairs, the *forehead* broad, the ovipositor of female long, the abdomen hairy, the antennae with a long third joint. The

wing with an appendix and the first posterior cell narrowed at opening, the fourth and anal cell closed. The legs are stout and hairy, more especially the hind tarsi and apex of hind tibiæ; the curious prolongation of middle tibiæ is short, armed with very stout short spines on outer border, and on inner border with thick hairs.

CODULA, Macquart.

Dipt. Exot. Suppl. 4, p. 374 (1849).

This genus, formed by the author for *C. limbipennis* from New South Wales, is allied to his genus *Brachyrrhopola*, to which his second species of *Codula* belongs, but it is at once distinguished by the absence of the curved spine on fore tibiæ, the moustache is composed of fewer hairs and confined to the oral opening, and the abdomen is stouter and shorter. With Macquart's second species and one placed by Bigot in this genus transferred to *Brachyrrhopola*, only Macquart's typical species and one nearly allied to it remain in the genus.

Codula limbipennis, Macq., Dipt. Exot. Suppl. 4, p. 374, pl. vii. fig. 2 (1849).

Codula vespiformis, Thoms., Eugen. Resa, Diptera, p. 464 (1869).

Codula limbipennis, Macquart.

Type ♂ seen in Paris Museum by me, from E. Australia. A species with a stout club-shaped abdomen, black and yellow in colouring. Wings deep brown on fore border.

Face black, covered with bright yellow tomentum, leaving a black stripe in the middle. *Moustache* composed of five or six long yellow bristly hairs. *Palpi* black, with black pubescence. *Antennæ* long, the third joint twice as long as the first two together, yellow. *Thorax* black with dull yellowish tomentum, two bright orange spots above the shoulders. *Abdomen* black, with bright orange tomentum beginning from the posterior border of the third segment, the fourth entirely black in the centre, the other segments wholly covered with the bright orange tomentum; underside black, with two orange-coloured segmentations only. *Legs* black, knees and hind tibiæ yellow. *Wings* clear, deep brown on the fore border, extending through both basal cells, then in a straight line to the apex, bordered by the third vein, not extending beyond its first forked branch.

Macquart's description is as follows:—

Thorax black. Abdomen red. Legs black; tibiæ red.

Wings brown on external border. Length 5 lines ♂. Palpi with black hairs. Beard black. Face with yellow tomentum: a black denuded space under the antennæ; moustache black. Forehead black. Antennæ fawn-coloured, the third joint brown at apex. Thorax dull with some grey tomentum, the shoulder spot fawn-coloured; sides shining. Abdomen: the first, second, and anterior border of third segment black, the remainder bright fawn-coloured; the fourth with a large blackish transverse dorsal spot, the seventh very small, black; underside wholly shining black. Femora fawn-coloured at apices; anterior and intermediate tibiæ black, at base fawn-coloured; posterior pair fawn-coloured. Anterior and intermediate tarsi black, posterior pair fawn-coloured. Wings hyaline, with a wide brown fore border; base of the second submarginal cell very narrow.

From east coast of New South Wales.

Codula vespiformis, Thomson.

One male from Burpengary, Queensland, in Brit. Mus. Coll.

Thomson described his type, a male from Sydney, as related to *C. limbipennis*, Macquart, but easily distinguished by the colour of abdomen.

Face golden yellow with a short black median stripe, raised at oral opening, which is covered by the moustache composed of yellow bristles. *Antennæ* reddish yellow; the third joint long cylindrical, notched on upper border, no style apparent. *Forehead* black, shining, with some grey and black hairs. *Thorax* black, with golden yellow tomentose spots on prothorax, shoulders, and two spots on lower border the same colour; one stout fulvous spine-like bristle at side of thorax above base of wing. *Scutellum* black, with horizontal golden-yellow tomentose stripes. *Abdomen* club-shaped, black, reddish golden tomentose on posterior border of second segment as a narrow band, a similar but wider band on posterior border of third segment, a very narrow one on posterior border of fourth, and fifth and sixth wholly reddish golden except at the sides; underside wholly black; on sides of first segment appears a small black bristle. *Legs* reddish yellow; femora with exception of apices black, apices of fore tibiæ and the tarsi fuscous. *Wings* hyaline, fore border deep brown, reaching the discal cell and almost filling up the basal cells, on apical half it does not extend beyond the third vein; all cells open, the fourth posterior and anal cells narrowed at border.

Length of specimen 15 mm.

BATHYPOGON, Loew.

Progr. Realschule, Meseritz, 1851, p. 13 (1851).

This genus was formed by Loew for his species *B. asiliformis* from Australia, and Schiner added *B. brachypterus*, Macq., besides other species from Chili.

The genus belongs to the group of *Dasyypogoninæ* with no spine on fore tibiæ and is distinguished by the rather short wings with the fourth posterior cell closed and the first widely open, the vein closing the fourth posterior cell is nearly on a line with the one closing the discal cell; the face has a distinct tubercle, with the moustache reaching the antennæ, which have a style-like bristle on the end of the third joint. It appears to be distinguished from *Stenopogon* by the broader face.

The statement in Schiner's table that the wings in this genus in proportion are long and narrow, is somewhat misleading, so far as concerns its relationship to the other Australian genera of *Dasyypogoninæ*, from which it is clearly distinguished by the rather short narrow wings, often not reaching far beyond half the length of the abdomen.

The following described and one new species, all from Australia, now belong to this genus.

The differences between some of the species are very small and probably with the advent of fresh material some will hardly be maintained as distinct.

Bathypogon brachypterus, Macq., Dipt. Exot. i. (2) p. 160, pl. iii. fig. 3 [*Dasyypogon*] (1838); id., Suppl. ii. p. 50 [*Dasyypogon*] (1847); Rond. Nuov. Ann. Sci. Nat. Bologna, (3) ii. p. 105 [*Astylum*] (1850).—*Proctacanthus postica*, Walker, List Dipt. vii. Suppl. 3, p. 655 (1855).

Bathypogon aoris, Walker, List Dipt. ii. p. 321 [*Dasyypogon*] [*Xiphocerus*] (1849), et vi. Suppl. 2, p. 480 [*Dasyypogon*] (1854); Kertész, Cat. Dipt. p. 100 [*Ancylorrhynchus*] (1909).—*Bathypogon asiliformis*, Loew, Progr. Realschule, Meseritz, 1851, 31 (1851). ? *Asilus mutillatus*, Walker, List Dipt. vii. Suppl. 3, p. 739 (1855).

Bathypogon pedanus, Walker, List Dipt. ii. p. 320 [*Dasyypogon*] (1849), et vi. Suppl. 2, p. 481 [*Dasyypogon*] (1854); Kertész, Cat. Dipt. p. 102 [*Ancylorrhynchus*] (1909).

Bathypogon testaceovittatus, Macq., Dipt. Exot. Suppl. v. p. 70, pl. ii. fig. 1 [*Dasyypogon*] (1855); Bigot, Ann. Soc. Entom. France, (5) viii. p. 221 (1878).

Bathypogon maculipes, Bigot, Ann. Soc. Entom. France, (5) viii. p. 433 (1878).

Bathypogon nigrinus, sp. n.

- | | |
|--|-----------------------------|
| 1. Tibiæ reddish | 2. |
| Tibiæ black | 3. |
| 2. Femora red and black; bristles on legs and thorax chiefly white | <i>brachypterus</i> , Macq. |

Femora red and black; bristles on legs and thorax chiefly black	<i>nigrinus</i> , sp. n.
Femora black; bristles on legs white, on thorax black	<i>pedanus</i> , Wlk.
3. Bristles on legs and thorax chiefly white	<i>auris</i> , Wlk.

Bathypogon brachypterus, Macquart.

Proctacanthus postica, Walker.

This species is erroneously placed in Kertész's catalogue under *Astylum*, a genus formed by Rondani for a species from Venezuela with no terminal bristle or style to the third joint of antennæ.

Type (♀) from New S. Wales seen by me in Paris Museum, 12. 4. 11.

In Brit. Mus. Coll.: type of *Proctacanthus postica*, Walker, from Melbourne (Mr. Baby's coll.), a female from New S. Wales (Saunders coll.), and another from Mackay, Queensland (*G. Turner*) (1894). In Mr. French's coll. a female from Victoria.

Macquart's description is as follows:—

Black. Abdomen ashy grey below. Femora and tibiæ red below.

Length 8 lines. ♀.

Face and forehead yellowish grey; moustache reaching to the base of antennæ, yellowish white; the upper hairs black. Beard and hairs of palpi white. Hind part of head with yellow hairs. Antennæ black. Thorax black; stripes on side and scutellum with grey tomentum. Abdomen black, with scattered small yellow hairs; sides and belly ashy grey. Legs: femora and tibiæ red; with a black stripe above, which is wider on the posterior ones; posterior legs black; tarsi black, with yellow hairs, which are also present on the tibiæ. Wings rather short, slightly yellowish; brownish at the apex; the fourth posterior cell closed, with a very oblique posterior vein, the posterior vein of fork of third vein longer than the anterior one.

New South Wales.

The antennæ have a short terminal style. Moustache black above, then yellow. In the specimens before me there are no black hairs on upper part of moustache. The small cross-vein of wing is situated slightly beyond the middle of the discal cell.

Length of specimens 18–20 mm.

Walker's type is probably a specimen of this species; the type is in very bad preservation.

Bathypogon aoris, Walker.

Bathypogon asiliformis, Loew.
? *Asilus mutillatus*, Walker.

Type female from Adelaide (Ent. Club), other females and males from Mackay, Queensland (*G. Turner*) (1894), and Burpengary, Queensland (*Dr. T. L. Bancroft*), 1904.

Distinguished from *Bathypogon brachypterus* by the wholly blackish femora, and by the blackish tibiæ, bristles on *legs* chiefly yellowish, the small cross-vein of *wing* is situated about the middle of the discal cell.

Two of the females and one male from Queensland have the femora largely reddish as in *B. brachypterus*, but the tibiæ remain blackish; perhaps eventually the two species may be merged in one.

Length 17-26 mm.

The type of *Asilus mutillatus*, Walker, from Australia, abdomen missing, is evidently a species of this genus, apparently similar to *B. aoris*, with the exception of the small cross-vein of wing, which is distinctly below the middle of the discal cell.

Loew suggested that his species *B. asiliformis* might be identical with *Dasygogon plumbeus*, Fabr. (Ent. Syst. iv. p. 382; id. Syst. Antl. p. 165; Wiedem. Ausszweifl. Ins. i. p. 413 [*Asilus*]; see Kertész's Cat. for further refs.), but that the description of this last is too poor to serve for recognition of the species, and further concluded *Dasygogon bœbius*, Walker (List Dipt. ii. p. 333), placed in the same group as *Dasygogon plumbeus* by Walker, might be identical; this last type is apparently destroyed, not being in the Brit. Mus. Coll. From Loew's description his species is evidently identical with *B. aoris*. The Fabrician and Walker species might well be deleted from list.

Bathypogon pedanus, Walker.

Type (♀) and another from Swan River, W. Australia (Ent. Club).

Distinguished from *B. brachypterus* by the wholly black femora, and from *B. aoris* by the pale reddish tibiæ; the posterior pair are darker. *Thorax* black, with very distinct whitish-grey sides; shoulders red.

Length 18 mm.

Bathypogon testaceovittatus, Macq., said by him to be

allied to *Bathypogon aoris*, Walker, was placed by Bigot in this genus, probably correctly, judging from the figure of *wing* given by Macquart; it is described by him as having the sides of *thorax* and *abdomen* testaceous. If the figure of the *wing* is correct this species is distinguished by the rounded angle of the anterior branch of the fourth vein emitted from the discal cell.

Bathypogon maculipes, Bigot, from Australia, measuring 22 mm., is described as having the anterior and intermediate femora black, but reddish in the middle, and the posterior pair with an elongated reddish spot. The anterior tibiæ with a similar smaller reddish spot, the bristles of tibiæ whitish.

Neither of these species is known to me.

Bathypogon nigrinus, sp. n.

Type (♂) and a series of males and one female from Burpengary, S. Queensland (*Dr. T. L. Bancroft*).

A species very similar to *B. brachypterus*, Macq., but distinguished by the black (not yellow) bristles on the *legs* (yellow bristles are only present on the fore tarsi) and by the paler indistinct red of the fore tibiæ, which are covered with short white pubescence, and by the first two joints of *antennæ* being red, not black.

Length 16–18 mm.

Face reddish, with some little grey tomentum, at the sides of the face and below the antennæ appearing grey, being covered with a silvery white and grey tomentum; the tubercle large, taking up most of the face; moustache reaching its whole length, formed of strong black bristles, with a few white ones below. *Palpi* black, with yellowish-white hairs. Beard white. *Antennæ* black; the first two joints red, with yellowish-white long hairs; the first joint twice the length of the second, the third broad, with a style-like ending. *Forehead* black, with yellowish-grey tomentum, which is silvery-white above antennæ; pubescence of black hairs, at vertex very stout, black, spine-like bristles; round head white hairs. *Thorax* brownish, with two median and side black stripes, posteriorly covered with silvery-grey tomentum, which also covers the sides. *Scutellum* black, bordered with same-coloured tomentum and with black bristles. Sides of thorax with long black bristles. *Abdomen* black, covered with short white hairs and with black bristles at the segmentations; sides covered with grey

tomentum; underside blackish. *Legs* armed with bristles, which are black, on the fore tarsi some yellow ones; coxæ red, with white tomentum and long white hairs and one black bristle below; femora black above, with white pubescence, below red, with long white hairs; tibiæ yellowish red on the outside, black on the inside, with white pubescence; underside of fore tarsi with yellow pubescence; tarsi reddish, covered with white pubescence. *Wings* hyaline, brownish at apex and on posterior border; the small transverse vein oblique, about the middle of the discal cell; the fourth posterior cell and the anal closed; the transverse veins closing the discal and fourth posterior cell are not quite in a straight line. Halteres reddish yellow.

STENOPOGON, LOEW.

Linn. Ent. ii. p. 453 (1847).

The genus is distinguished by the very narrow *face*, with a keel-shaped tubercle, the face becoming narrower still at antennæ, the moustache reaching nearly to the antennæ. *Wings* with the first posterior cell more or less narrower at border, the fourth closed or open. In the Australian species the front posterior cell is hardly narrower at border.

The following species are recorded from Australia:—

- Stenopogon elongatus*, Macq., Dipt. Exot. Suppl. 1, p. 194, pl. vii. fig. 6 (1844), et Suppl. 2, p. 50 [*Dasypogon*] (1846).—*Dasypogon flavifacies*, Macq., l. c. Suppl. 4, p. 363, pl. vi. fig. 6 (1849). *Dasypogon digentia*, ♂, Walker, List Dipt. pt. ii. p. 316 (1849), et part vi. Suppl. 2, p. 480 (1854); Kertész, Cat. Dipt. p. 101 [*Ancylorrhynchus*] (1909). *Dasypogon lanatus*, ♀, Walker, l. c. p. 317, et part vi. Suppl. 2, p. 486 (1854); Kertész, l. c. [*Ancylorrhynchus*] (1909). *Dasypogon thalpius*, ♂, Walker, l. c. p. 317, et part vi. Suppl. 2, p. 481 (1854); Kertész, l. c. [*Ancylorrhynchus*] (1909). *Dasypogon agave*, Walker, l. c. p. 317, et pt. vi. Suppl. 2, p. 480 (1854). *Stenopogon fraternus*, Bigot, Ann. Soc. Ent. France, (5) viii. p. 421 (1878).
- Stenopogon nicoteles*, ♂, Walker, List Dipt. pt. ii. p. 320 (1849), et pt. vi. Suppl. 2, p. 481 [*Dasypogon*] (1854); Kertész, Cat. Dipt. p. 102 [*Ancylorrhynchus*] (1909).

Stenopogon elongatus, Macq.

- Dasypogon flavifacies*, ♀, Macq.
Dasypogon digentia, ♂, Walker.
Dasypogon lanatus, ♀, Walker.
Dasypogon thalpius, ♂, Walker.
Dasypogon agave, ♂, Walker.
Stenopogon fraternus, Bigot.

Macquart's types both seen by me in Paris Museum, 12. 4. 11. *S. elongatus*, ♂ ♀, from New South Wales; *D. flavifacies*, a female (not a male) from Tasmania.

In Brit. Mus. Coll.:—

Type of *D. digentia*, a male from New South Wales. Haslar Hospital.

Type of *D. lanatus*, a male from Van Diemen's Land (*J. Brynce*).

Type of *D. thalpius*, a male from Perth, W. Australia (*G. Clifton*).

Type of *D. agave*, a male from Swan River, W. Australia.

Also a series of males and females from S. Australia, Tasmania, Queensland, and W. Australia.

Macquart's description is as follows:—

Elongated, black. Abdomen narrow, the apex testaceous. Moustache golden. Antennæ black. Legs testaceous.

Length 9 lines. ♂ ♀.

Palpi black, with black hairs. Face black; moustache and beard golden yellow, the first reaching the antennæ. Forehead black, with black hairs. Antennæ black; the first joint a little elongated, with black hairs below. Thorax black, with black hairs; sides with greyish-yellow tomentum and whitish hairs. Abdomen narrow, 6 lines long, black, with whitish tomentum and long whitish hairs below; genital organs a little swollen, testaceous; the anterior half of the last two segments testaceous. Legs with black bristles and whitish hairs; anterior femora black, testaceous at the apex, posterior ones black, the posterior half below testaceous; tibiæ black at apex; anterior tibiæ with no spines; tarsi black. Wings clear, a little yellowish; apex slightly brownish.

From New South Wales. Coll. M. Fairmaire and M. Bigot. One specimen in the coll. of Marquis Spinola comes from Sydney Island, Oceania.

Macquart further remarks, in the second Supplement, that the species which appears common in Tasmania affords him several subforms. One female differs from the type by the entire black abdomen, ovipositor, and femora; another has the femora entirely testaceous; in the males the abdomen is black and the genital organs blackish testaceous.

These remarks are fully borne out by an examination of Walker's type and others in the Brit. Mus. Coll. *D. digentia* has the abdomen entirely black. In some specimens the testaceous colouring, if present, is confined to the last segment. The bristles on the legs are often fulvous instead of

black or partly so. Macquart's type of *D. flavifacies* has the abdomen and femora entirely black.

Length of specimens, males from 17-23 mm., females from 20-25 mm.

Stenopogon fraternus from the description is no doubt the same as *S. elongatus*.

Stenopogon nicoteles, Walker.

Type (♂) from Swan River, West Australia (*Dr. Richardson*).

A small black species allied to *S. elongatus*, but the moustache is silvery white below, with black hairs above. *Face* black, covered with silvery-white tomentum. *Thorax* black, with grey tomentose stripes. *Abdomen* black, covered with brownish tomentum. *Legs* black, the tibiæ pale reddish yellow, the posterior pair almost wholly blackish; bristles on legs pale yellow. *Wings* hyaline; small transverse vein below the middle of discal cell.

Length 14½ mm.

PSILOZONA, gen. nov.

Formed for two species from Queensland.

Blue-black shining species. Fore and middle tibiæ and tarsi fringed with hairs, the tarsi broad. *Wings* with the fourth and anal cells closed, the veins closing the fourth posterior and discal cell almost parallel. *Face* shining, broad, somewhat raised above oral opening; the moustache composed of strong bristles, not confined to the oral opening, but not extending up the face; the *forehead* broad, shining, with hairs at sides. Head broader than it is high, excised in centre. Fore tibiæ have no curved spine. *Antennæ* with a distinct style.

Psilozona albitarsis, sp. n.

One male type and two females (type 1903) from Townsville, Queensland (*F. P. Dodd*), 1904 and 1903.

A blue-black species, with brownish *wings*. The male with white-haired fore tarsi and the base and apex of *abdomen* white-haired. Female with *abdomen* bare, long, and pointed at apex, the fore tibiæ with black hairs.

Length, ♂ 17, ♀ 23 mm.

♂. *Face* black, shining, with whitish tomentum at the

sides. Moustache composed of numerous strong black bristles, with some yellowish ones below, not extending to the sides, which have soft whitish pubescence. *Palpi* black, clothed with coarse, white, fairly long hairs, and with some stout black bristles at the apices. Proboscis slightly longer. Beard of thick white pubescence. *Antennæ* black, the third joint reddish yellow, the first two joints with black hairs, the third bare, with a distinct style, longer than the first two joints together and broader. *Forehead* black, with grey pubescence. Hind part of head with whitish hairs. *Thorax* black, with sparse greyish pubescence on the dorsum; the shoulders covered with ashy-grey tomentum; two stripes of grey tomentum apparent; sides whitish, with white pubescence; breast-sides black, with a broad horizontal whitish stripe and white pubescence; one long black bristle on side of thorax beyond the transverse suture and three shorter ones below on the breast-sides just above the suture. *Scutellum* black, with long whitish pubescence. *Abdomen* bluish, shining, the first three segments with whitish pubescence, fourth and fifth with very short, chiefly black pubescence, sixth and seventh with bristly yellowish hairs; anus with similar hairs; sides of abdomen with white hairs, except on the fourth and fifth segments, where it is short and black. *Legs* black, slender, the middle and anterior tibiæ and tarsi with thick fringes of black hairs, replaced on the fore tarsi by white hairs, which cover the tarsi on upper sides and are very noticeable. Hind tibiæ and tarsi armed with some short black bristles. *Wings* hyaline, brown on basal half, extending to the apex of first basal cell, and to the base of the discal cell, filling most of the anal cell, leaving the axillary to be almost hyaline; veins brown, the fourth posterior and anal cell closed, the transverse veins closing discal and fourth posterior cells almost parallel, the fourth at base not pedunculated, the small transverse vein situated beyond the middle of discal cell.

Female similar. *Abdomen* longer and pointed, the pubescence much less and shorter, white on the first two segments, then black; the first segment is blackish, the next three purplish, the remaining ones blue, metallic, shining; sides with short white hairs, intermixed with black on the first three segments, then black and shorter. *Legs*: the pubescence is wholly black. *Face* with the sides more widely covered with light tomentum, which is golden yellow; the hairs on first two joints of *antennæ* are yellow below, the hairs on palpi yellowish. *Wings* more wholly brown, only

the apex and centres of fourth and fifth cells and axillary lobe being hyaline.

Psilozona nigratarsis, sp. n.

Three males from Townsville, Queensland (F. P. Dodd), 1903.

A species very similar to *P. albitarsis*, but distinguished by the pale wings, the absence of white hairs on the fore tarsi, and by the presence of four black bristles on the breast-side just above the transverse suture in the type only. The moustache has more yellow hairs and fewer black bristles, the colouring on sides of face is golden yellow; the hairs on palpi, on lower part of the first two antennal joints, composing the beard, and round head are yellowish. *Thorax* not quite so pubescent. *Abdomen* with whitish pubescence only at base and a little short, scattered, white pubescence on the apex. The pubescence on fore legs less thick.

Length 18 mm.

DAMALIS, Fabr.

Syst. Antl. p. 147 (1805).

Only one species is recorded from Australia:—

Damalis fuscipennis, Macq., Dipt. Exot. Suppl. 1, p. 222 (1844).

This must be nearly allied to *Damalis pandens*, Walker, Proc. Linn. Soc. London, iv. p. 104 [*Discocephala*] (1860), from Celebes, the type in the Brit. Mus. Coll.; but that of *Damalis lugens*, Wlk., from New Guinea, is not to be found.

Doleschall recorded one species, *Damalis erythrophthalmus*, from Amboina.

ANCYLORRHYNCHUS, Latreille.

Fam. Règn. Anim. p. 490 (1825).

Xiphocera, Macq., Suites à Buffon, i. p. 279 (1834).

See Kertész, Cat. Dipt. p. 100, for other synonyms.

This genus has not been recorded from Australia itself. All the Walker species placed in it in Kertész's Cat. belong to other genera; v. d. Wulp records one species from the Island of Waigou, *X. complacita*, and Doleschall one from Amboina, *X. rufithorax*.

HETEROPOGON, LOEW.

Linn. Ent. ii. p. 488 (1847).

Dasygogon bæbius, Walker, is recorded from Australia. The type is not to be found in the Brit. Mus. Coll. It probably does not belong to this genus, in which it is placed in Kertes's Cat.; but, as stated above, Loew suggests it may be a *Bathypogon* species.

The following Walker species from unknown localities also placed here by Kertes do not belong to this genus, having curved spines on fore tibiæ, and the fourth posterior cell is closed, in line with the transverse vein closing discal cell; they appear to belong to a genus near *Deromyia*:—*ægon*, *animetus*, *cerretanus*, *copreus*, *silanus*, *politus*. Generically similar are *carvilus* under *Oligopogon* in Kertes's Cat., and *volcatus* under *Isopogon*; they do not appear to be from Australia.

Dasygogon fossius, Walker, from unknown locality, is exactly similar to specimens labelled the same from S. Africa, and is evidently a South-African species; it has spines on the fore tibiæ.

[To be continued.]

BIBLIOGRAPHICAL NOTICES.

A Revision of the Ichneumonidæ, based on the Collection in the British Museum (Natural History), with Descriptions of new Genera and Species. Part I. Tribes Ophionides and Metopiides. By CLAUDE MORLEY, F.Z.S., F.E.S. London: Printed by Order of the Trustees of the British Museum. 8vo. 1912. Pp. xi, 88. Coloured plate.

LITTLE was done to elucidate the collection of Ichneumonidæ in the British Museum since it was arranged by Frederick Smith in 1860 until Mr. Morley recently took up the work, and the present small volume is published as a first instalment. It includes a list, generally with comments and often with full descriptions, of 198 species of Ophionides and 33 Metopiides, and 5 genera and about 70 species are described as new. The coloured plate is an admirably enlarged diagram of the common and widely distributed *Ophion luteus*, L., illustrating its structure and neuration.

W. F. K.